

AMENDMENTS TO THE CLAIMS:

The listing of claims provided herein shall replace all prior versions and listings of the pending claims:

Listing of Claims:

Claims 1-37 (canceled)

38. (currently amended) The multi-pole rotor according to claim 35 39, wherein the width of said slots varies in a stepwise manner in the direction from the inner surface of the rotor to the outer surface of the rotor.

39. (currently amended) The multi-pole rotor according to claim 35, A multi-pole rotor of an electric machine, comprising:

ferromagnetic pole segments each extending from an inner surface of the rotor to an outer surface of the rotor;  
slots separating each of said ferromagnetic pole segments, each of said slots extending from the inner surface of the rotor to the outer surface of the rotor, and each of said slots also having a width varying along a direction from the inner surface of the rotor to the outer surface of the rotor; and

a magnet structure constructed and arranged within each of said slots such that said magnet structure also has a width varying along the direction from the inner surface of the rotor to the outer surface of the rotor, wherein said magnet structure comprises at least two permanent magnets disposed immediately adjacent to each other each having a rectangular cross section.

Claims 40-43 (canceled)

44. (previously added) A multi-pole rotor of an electric machine, comprising:

ferromagnetic pole segments each extending in a radial direction from an inner surface of the rotor to an outer surface of the rotor;

slots separating each of said ferromagnetic pole segments, each of said slots extending radially from the inner surface of the rotor to the outer surface of the rotor, each of said slots having a radial slot height defined along a direction from the inner surface of the rotor to the outer surface of the rotor, and each of the slots also having a width varying along said slot height in a stepwise manner such that a first slot portion extends entirely from the inner surface of the rotor to the outer surface of the rotor and at least a second slot portion extends from the outer surface of the rotor but not entirely to the inner surface of the rotor; and

a magnet structure constructed and arranged within each of said slots, said magnet structure comprising a first permanent magnet having a rectangular cross-section disposed within the first slot portion and at least a second permanent magnet having a rectangular cross-section disposed within the second slot portion.

Claims 45-48 (canceled)

Claim 49 (previously withdrawn)

Claims 50-53 (canceled)

Claim 54 (previously withdrawn)